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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,934	02/09/2004	Peter Parks	200209339-1	8628
22879                      7590                      08/17/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER  KEEFER, MICHAEL E	
			ART UNIT	PAPER NUMBER
			2154	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/774,934

Applicant(s)

PARKS ET AL.

Examiner

Michael E. Keefer

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This Office Action is responsive to the Application filed 2/9/2004.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding **claims 13-30**, which are directed to a client-side rediscovery method. In order for a claim to be statutory it must have a useful, concrete and tangible result. In this case the result is useful and concrete but it is not tangible. The mere act of determining (in the case when the process is not performed) or the mere act of selectively updating (when the process is performed) does not produce a tangible result.

Regarding **claims 26 and 28**, the "computer-readable medium," in accordance with Applicant's specification, may be carrier waves. This subject matter is not limited to that which falls within a statutory category of invention because it is not limited to a process, machine, manufacture, or a composition of matter. Instead, it includes a form of energy. Energy does not fall within a statutory category since it is clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Roy et al. (US 2002/0062366), hereafter Roy.

Regarding **claims 1-9**, Roy discloses:

1. A client-side auto-rediscovery system, comprising:

a data store configured to store a pairing data that relates a service requesting networked device and a service providing networked device; and  
(Fig. 7 contains data indicating pairing data between printer names and the network addresses that a requesting device can use to reach them)

a logic configured to determine whether the pairing data should be updated and to selectively update the pairing data. (Fig. 7 is generated upon user request, [0009])

2. The system of claim 1, where the data store comprises one or more of, a file, a memory, and a register. (Fig. 7 is both a HTML file, which also must be stored on a memory)

3. The system of claim 2, where the pairing data comprises one or more of, an IP address, a unique hardware identifier, a unique software identifier, a virtual identifier, and a dynamic identifier. (Fig. 7 discloses IP addresses and printer names)

4. The system of claim 3, where the unique hardware identifier comprises one or more of, a media access control (MAC) address, a globally unique identifier (GUID), an object identifier (OID), and an IP address. (Fig. 7 discloses IP addresses and printer names)

5. The system of claim 4, where the service requesting networked device comprises one of, a computer, a printer, a scanner, and a server. (Fig. 1 discloses HTTP client 15, which is a computer)

6. The system of claim 5, where the service providing networked device comprises one of, a computer, a printer, a scanner, and a server. (Fig. 7 discloses printers)

7. The system of claim 6, where the logic is further configured to generate a uni-cast simple network management protocol (SNMP) GET message to be delivered from the service requesting networked device to the service providing networked device to request a binding data that facilitates determining whether to update the pairing data. ([0041] discloses sending uni-cast SNMP get messages)

8. The system of claim 7, where the logic is further configured to selectively generate a multicast SNMP GET message to be delivered to a plurality of service providing networked devices to request a binding data that facilitates updating the pairing data. ([0025] discloses sending SNMP broadcast GET messages)

9. The system of claim 8, where the binding data comprises one or more of, a MAC address, a GUID, an OID, an IP address, and a virtual name. ([0026] discloses

Art Unit: 2154

extracting IP address information from the broadcast response. [0041] discloses retrieving the device name (i.e. a virtual name) from the unicast SNMP request.)

5. Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Roy et al. (US 2002/0062366), hereafter Roy.

Regarding **claim 12**, Roy discloses:

A client-side auto-rediscovery system, comprising: means for storing a pairing data that relates a service requesting networked device and a service providing networked device; means for doing weak discovery between the service requesting networked device and the service providing networked device; and means for selectively performing automatic strong discovery to rediscover the service providing networked device based on the weak discovery and selectively updating the pairing data based on the strong discovery. (Abstract. First a UDP based request is broadcasted to the network to receive device information (i.e. a weak discovery), then in the end any remaining nodes are updated using specific SNMP requests. (i.e. a selectively strong discovery))

6. Claims 13, 15-29, and 31-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Roy.

Regarding **claims 13 and 15-25**, Roy discloses:

A client-side auto-rediscovery method, comprising: determining whether to perform a process that facilitates relating a first networked device and a second networked device; and performing the process by: selectively requesting from one or more networked devices a binding data that facilitates uniquely identifying

a networked device; receiving, in response to requesting the binding data, a message that includes the binding data; and selectively updating a pairing data that relates the first networked device and the second networked device based, at least in part, on the binding data. ([0025] and [0026] disclose selectively requesting, receiving a response with data, and updating a pairing data with the data received.)

15. The method of claim 13, where determining whether to perform the process is performed when the first networked device requests a service from the second networked device. (Fig. 1, a request from HTTP client 15 to management station 5 causes the process to be performed)

16. The method of claim 13, where determining whether to perform the process includes requesting the binding data from the second networked device via a uni-cast message. ([0041] discloses using a unicast SNMP message)

17. The method of claim 16, where the uni-cast message comprises an SNMP GET request. ([0041] discloses using a unicast SNMP message)

18. The method of claim 17, where the binding data comprises one or more of, a MAC address, an OID, a GUID, an IP address, and a virtual name. ([0026] discloses extracting IP address information from the broadcast response. [0041] discloses retrieving the device name (i.e. a virtual name) from the unicast SNMP request.)

19. The method of claim 13, where the binding data is requested in one or more of, a broadcast message, a multicast message, and a uni-cast message.



([0025 discloses using a broadcast SNMP message, [0041] discloses using a unicast SNMP message)

20. The method of claim 19, where one or more of, the broadcast message, the multicast message, and the uni-cast message comprise one or more of, an SNMP GET request, and an SLP request. ([0025 discloses using a broadcast SNMP message, [0041] discloses using a unicast SNMP message)

21. The method of claim 20, where the binding data comprises one or more of a MAC address, an OID, a GUID, an IP address, and a virtual name. ([0026] discloses extracting IP address information from the broadcast response. [0041] discloses retrieving the device name (i.e. a virtual name) from the unicast SNMP request.)

22. The method of claim 21, where the binding data is received in a second uni-cast message. ([0025 discloses data being returned in an SNMP response, [0041] discloses the data being returned in a SNMP response)

23. The method of claim 22, where the second uni-cast message comprises one or more of, an SNMP GET RESPONSE message, and an SLP message. ([0025 discloses data being returned in an SNMP response, [0041] discloses the data being returned in a SNMP response)

24. The method of claim 13, where the pairing data includes one or more of, an IP address, a MAC address, an OID, a GUID, and a virtual name. ([0026] discloses extracting IP address information from the broadcast response. [0041]



Art Unit: 2154

discloses retrieving the device name (i.e. a virtual name) from the unicast SNMP request.)

25. The method of claim 13, where the process is performed by a device driver. (Fig. 1, Device Discovery Task 10 drives the management station to perform the process)

Regarding **claims 26-29**, Roy discloses:

The limitations of claims 26-29 are substantially the same as those recited in claim 13 except for the existence of a computer readable medium. A computer readable medium is clearly implied by management station 5 and HTTP client 15 in figure 1.

Regarding **claims 31-36**, Roy discloses:

The limitations of claim 31 are substantially the same as those recited in claim 13 except that they call for "re-discovering" a second connection and "re-associating" the stored connection. Roy discloses these additional limitations because the devices will be discovered and associated again when the HTTP client makes additional requests to the management device 5.

32. The method of claim 31, where discovering the first connection comprises sending one or more of, a broadcast message and a multicast message by one or more of, an SNMP message and an SLP message to one or more service providing networked devices. ([0025 discloses using a broadcast SNMP message)

33. The method of claim 32, where client-side associating the stored connection comprises storing one or more of, a unique hardware identifier, a unique software identifier, a virtual identifier, a dynamic identifier, and a uni-cast IP address associated

Art Unit: 2154

with the service providing networked device. ([0026] discloses extracting IP address information from the broadcast response)

34. The method of claim 33, where validating the stored connection to the service providing networked device comprises sending a uni-cast SNMP GET message to the service providing networked device. ([0041] discloses using a unicast SNMP message)

35. The method of claim 34, where selectively re-discovering the second connection comprises sending one or more of, a broadcast message and a multicast message by one or more of, an SNMP message and an SLP message to one or more service providing networked devices. ([0025 discloses using a broadcast SNMP message)

36. The method of claim 35, where client-side re-associating the stored connection comprises updating a pairing table. (Fig. 7 would be re-associated based off of the results of a subsequent request from the HTTP client)

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roy as applied to claim 13 above, and further in view of Wu (US 5185860).

Roy discloses all the limitations of claim 14 except for a periodic determination of when to perform the address updating process.

Art Unit: 2154

The general concept of updating address tables periodically is well known in the art as taught by Wu. (Col. 9, the paragraph describing Fig. 16 discloses waiting for a set period, then re-querying for updated address data.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Roy with the general concept of updating address tables periodically as taught by Wu in order to decrease the amount of network traffic caused by a request.

9. Claims 10 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu in view of Roy.

Regarding claims 10 and 30, Wu discloses:

A data store configured to store IP and MAC addresses associated with devices on a network. (Col. 8 lines 56-59 discloses a node list which stores the physical and IP addresses for devices on the network (i.e. nodes.)

A second logic configured to produce a multicast (i.e. broadcast) snmp get message and update the data store based upon that information. (Col. 6 lines 33-46 discuss broadcasting SNMP get messages, Col. 9 lines 12-44 discuss updating the data store)

A first unicast logic to update network connectivity information about the nodes. (Col. 7 line 16 - Col. 8 line 5)

Wu discloses all the limitations of claims 10 and 30 except that the first logic used is SNMP.

Art Unit: 2154

Roy discloses a system that uses both broadcast (multicast) and unicast SNMP messages to discover device information about nodes in the network.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wu and Roy in order to eliminate the need for extra network protocols to be used, thus making the system simpler.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wu and Roy as applied to claim 10 above, and further in view of Moetteli (US 2002/0049809).

Wu and Roy disclose all the limitations of claim 10 except that the data store is an XML file. Roy, however, does disclose the data store being a HTML file.

Moetteli teaches that XML is a substitute for HMTL.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Wu and Roy with the teaching that XML is a substitute for XML as taught by Moetteli in order to make the data store display more customizable.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Phaal (US 2002/0075809) discloses a network monitoring system that creates address tables based upon the interrogation of network devices using SNMP.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael E. Keefer whose telephone number is (571) 270-1591. The examiner can normally be reached on Monday through Friday 5:30am-2pm.

Art Unit: 2154

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MEK 8/9/2007



**NATHAN FLYNN**  
**SUPERVISORY PATENT EXAMINER**